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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/14/2000

Jefferson P. Ward

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06/02/2006

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EXAMINER

PHAM, THIERRY L

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/661,898	<b>Applicant(s)</b> WARD ET AL.	
	<b>Examiner</b> Thierry L. Pham	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,8,9,13 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9,13,17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

- This action is responsive to the following communication: an Amendment filed on 3/3/06.
- 1, 3-5, 8-9, 13, 16-18 are pending, wherein claim 18 is newly added.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 8, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shima (US 6149323), and in view of Fujimoto et al (US 6204867).

Regarding claim 1, Shima discloses a method of selecting of selecting one of a plurality of print settings (selecting from a plurality of stored print setting values for printing current document, fig. 3, col. 2, lines 15-67) for printing a current document comprising:

- gathering historical document data (gathering historical data of stored document such as titles, col. 3, lines 20-25) relating to prior print setting selections (stored print setting values A1-A4 or B1-B4, fig. 2, col. 3, lines 1-40 and col. 4, lines 6-45);
- correlating each prior print setting selection (print setting values correlated with stored document, col. 3, lines 17-40) including user's prior print setting preference (each document is linked with a setting value files as shown in fig. 3 & 6) with one or more characteristics of the current document data (col. 3, lines 20-25);
- comparing (comparing correlated print setting values to the current document attributes to determine whether previous stored setting values can be used, if not, creates a new setting values, fig. 3, col. 4, lines 45 to col. 5, lines 1-60 and col. 7, lines 3-32) the correlated print setting selections to one or more characteristics of the current document to select a print setting from among the plurality of print settings.

However, Shima fails to teach and/or suggest a method of automatically selecting a print setting from among the prior print settings, the selected print setting being best suited to the user's prior print setting preferences.

Fujimoto, in the same field of endeavor for printing, a method of automatically selecting (automatically selecting a print mode based upon past usage modes, col. 18, lines 44 to col. 19, lines 12) a print setting from among the prior print settings, the selected print setting being best suited (the selected print mode is best for image data type, for example, color print mode is best for color image data, col. 18, lines 44 to col. 19, lines 12) to the user's prior print setting preferences.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify print system method of Shima to include a method of automatically selecting a print mode based upon image data type and its past usage frequencies (*i.e. in other words, if a color print mode has been consistently used for color image data, then it would be obvious to use the same color print mode for future print job that contains color image data*) as taught by Fujimoto because of a following reason: (●) to ensure high print output quality by utilizing the best compatible print mode; (●) automatically selecting best print mode without human invention reduces operating time and costs; (●) wasted power consumption can be prevented (col. 17, lines 20-28 of Fujimoto).

Therefore, it would have been obvious to combine Shima with Fujimoto to obtain the invention as specified in claim 1.

Regarding claim 8, Shima discloses a method of selecting one of a plurality of print settings for printing a current document (selecting from a plurality of stored print setting values for printing current document, fig. 3, col. 2, lines 15-67) comprising the steps of:

- gather prior document data (gathering historical data of stored document such as titles, col. 3, lines 20-25) relating to prior setting selections including a user's preferred print setting associated (stored print setting values A1-A4 or B1-B4, fig. 2, col. 3, lines 1-40 and col. 4, lines 6-45) with the prior document data (each document is linked with a setting value files as shown in fig. 3 & 6);

- comparing (comparing correlated print setting values to the current document attributes to determine whether previous stored setting values can be used, if not, creates a new setting values, fig. 3, col. 4, lines 45 to col. 5, lines 1-60 and col. 7, lines 3-32) the prior print settings selections and associated prior document data to at least one of the current document;
- selecting (step S6, fig. 3) a print setting for the document based on the comparison.

However, Shima fails to teach and/or suggest a method of automatically selecting a print setting from among the prior print settings, the selected print setting being best suited to the user's prior print setting preferences.

Fujimoto, in the same field of endeavor for printing, a method of automatically selecting (automatically selecting a print mode based upon past usage modes, col. 18, lines 44 to col. 19, lines 12) a print setting from among the prior print settings, the selected print setting being best suited (the selected print mode is best for image data type, for example, color print mode is best for color image data, col. 18, lines 44 to col. 19, lines 12) to the user's prior print setting preferences.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify print system method of Shima to include a method of automatically selecting a print mode based upon image data type and its past usage frequencies (*i.e. in other words, if a color print mode has been consistently used for color image data, then it would be obvious to use the same color print mode for future print job that contains color image data*) as taught by Fujimoto because of a following reason: (●) to ensure high print output quality by utilizing the best compatible print mode; (●) automatically selecting best print mode without human invention reduces operating time and costs; (●) wasted power consumption can be prevented (col. 17, lines 20-28 of Fujimoto).

Therefore, it would have been obvious to combine Shima with Fujimoto to obtain the invention as specified in claim 8.

Regarding claim 16: Claim 16 recites limitations that are similar and in the same scope of invention as to those in claim 1 except computer readable memory for storing computer programs. All computers/printers have some type of computer readable medium (i.e. hard disks

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33b, fig. 3 of Fujimoto) for storing computer programs, hence claim 16 would be rejected using the same rationale as in claim 1.

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shima and Fujimoto, and further in view of Minagawa (US 6614550).

Regarding claim 3, the combinations of Shima and Fujimoto fail to teach and/or suggest automatically determining an amount of text data in the current document; and automatically adjusting a print setting associated with the current document based on the amount of text data and the user's prior print setting preference.

Minagawa, in the same field of endeavor for printing, teaches automatically determining an amount of text data (col. 9, lines 35-42) in the current document; and automatically adjusting (fig. 8, abstract, col. 2, lines 4-10 and col. 6, lines 18-28) a print setting associated with the current document based on the amount of text data and the user's prior print setting preference.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify print system method of Shima and Fujimoto to include instructions automatically determining an amount of text data in the current document; and automatically adjusting a print setting associated with the current document based on the amount of text data and the user's prior print setting preference as taught by Minagawa because of a following reason: (●) to save print medias (col. 9, lines 55-58).

Therefore, it would have been obvious to combine Shima, Fujimoto, and Minagawa to obtain the invention as specified in claim 3

Regarding claim 4, Minagawa further teaches automatically determining an amount of image data (col. 9, lines 35-42) in the current document; and automatically adjusting a print setting (fig. 8, abstract, col. 2, lines 4-10 and col. 6, lines 18-28) associated with the current document based on the amount of image data and the user's prior print setting preferences.

Regarding claim 5, Minagawa further discloses automatically comparing an amount of text data in the document and an amount of image data (amount of image data, col. 9, lines 35-42) in the document with a user's prior print setting preference associated with prior documents

having a similar amount of text data and image data; and automatically selecting (automatically selecting, col. 9, lines 35-42) a print setting for the document from the plurality of print settings based on the comparison.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 8, 16 have been considered but are moot in view of the new ground(s) of rejection due to newly added features/limitations as cited in claims 1, 8, and 16.

- Regarding claims 1, 8, and 16, the applicants argued the cited prior arts of record fail to teach and/or suggest “automatically selecting” a printing setting from among the prior print settings.

In response, the applicants are arguing subject matter not previously cited in claims 1, 8, and 16. Applicant's arguments, see pages 6-7, filed 3/3/06, with respect to claims 1, 3-5, 8-9, 16-17 have been fully considered and are persuasive. The 35 USC § 112, second paragraph rejection of claims 1, 3-5, 8-9, 16-17 has been withdrawn.

### ***Allowable Subject Matter***

Claims 9, 13, 17-18 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art of record fails to teach and/or suggest automatically analyzing a plurality of characteristics relating to document data in the current document, the plurality of characteristics including a host device type, a type of text data, a type of image data, an infrared communication, and a radio frequency communication, automatically comparing plurality of analyzed characteristics with user's prior print settings preference associated with prior documents, and to automatically select an appropriate print setting based upon the analyzed characteristics ***and in combinations of other features*** as cited in independent claims 9 & 17. The examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of prior arts that teaches the above limitations and in combinations of other features cited in claims 9 & 17.

*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

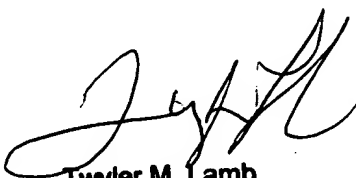
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham



Twyler M. Lamb  
Supervisory Patent Examiner